

WHAT IS CLAIMED IS:

1. A circulative cooling apparatus, comprising:

a first chamber for absorbing heat energy of a heat source;

5 a second chamber for dissipating the heat energy, the second chamber being filled with a fluid;

a first pipe connecting the first chamber and the second chamber, wherein fluid vapor flows through the first pipe;

10 a second pipe connecting the first chamber and the second chamber; a drawing means situated in the second chamber and connected to an end of the second pipe; and

a porous structure on internal walls of the first chamber, the second pipe and the drawing means, the porous structure having the fluid inside; wherein the drawing means transports the fluid in the second chamber to

15 the first chamber through the second pipe by a capillary attraction of the porous structure.

2. The circulative cooling apparatus of claim 1, wherein the first chamber, the second chamber, the first pipe and the second pipe are integrally formed.

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3. The circulative cooling apparatus of claim 1, wherein the first chamber further comprises a gas channel, and the channel is connected to an end of the first pipe and limits a flowing direction of the vapor of the fluid.

4. The circulative cooling apparatus of claim 3, wherein the gas channel is spread inside the first chamber to collect the vapor of the fluid.

5. The circulative cooling apparatus of claim 3, wherein a volume of the
gas channel is less than a volume of the vapor of the fluid in the porous
structure of the first chamber.

10 6. The circulative cooling apparatus of claim 1, wherein a horizontal position of the second chamber is lower than a horizontal position of the first chamber.

7. The circulative cooling apparatus of claim 1, wherein the drawing means contacts the fluid in the second chamber.

15 8. The circulative cooling apparatus of claim 1, wherein a material of the porous structure comprises metal.

20 9. The circulative cooling apparatus of claim 1, wherein the circulative cooling apparatus further comprises a plurality of heat dissipation devices installed on the first chamber and the second chamber.

10. The circulative cooling apparatus of claim 9, wherein the heat dissipation devices comprise dissipation fins or dissipation fans.

25 11. A circulative cooling apparatus, comprising:

- a first chamber for absorbing heat energy of a heat source;
 - a second chamber for dissipating the energy, the second chamber being filled with a fluid;
 - 5 a first pipe connecting the first chamber and the second chamber, wherein vapor of the fluid flows through the first pipe;
 - a second pipe connecting the first chamber and the second chamber;
 - a drawing means situated in the second chamber and connected to an end of the second pipe, wherein the drawing means contacts the fluid in the second chamber;
 - 10 a gas channel, wherein the gas channel is connected to an end of the first pipe and limits a flowing direction of the vapor of the fluid; and
 - a porous structure on internal walls of the first chamber, the second pipe and the drawing means, and the porous structure having the fluid inside;
 - wherein the drawing means transports the fluid in the second chamber to
 - 15 the first chamber through the second pipe by a capillary attraction of the porous structure.
12. The circulative cooling apparatus of claim 11, wherein the first chamber, the second chamber, the first pipe and the second pipe are integrally formed.
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13. The circulative cooling apparatus of claim 11, wherein the gas channel is spread inside the first chamber to collect the vapor of the fluid.

14. The circulative cooling apparatus of claim 11, wherein a volume of the gas channel is less than a volume of the vapor of the fluid in the porous structure of the first chamber.

5 15. The circulative cooling apparatus of claim 11, wherein a horizontal position of the second chamber is lower than a horizontal position of the first chamber.

10 16. The circulative cooling apparatus of claim 11, wherein a material of the porous structure comprises metal.

15 17. The circulative cooling apparatus of claim 11, wherein the circulative cooling apparatus further comprises a plurality of heat dissipation devices installed on the first chamber and the second chamber.

18. The circulative cooling apparatus of claim 17, wherein the heat dissipation devices comprise dissipation fins or dissipation fans.